Pocket Notebook
PN 21-08-21 (1921-1922)

This notebook dates from August 1921 - March 1922. The pocket notebook contains notes by Thomas A. Edison relating to experiments with phonograph record masters, blank records, varnish, chalk telephones and Ford starter batteries. There are notes about jobber sales and the varnish department. The notebook was originally found at Glenmont.

PN-21-08-21

☆3346

EDIS 110241

110,241

Jan'y 21/21

~~[illegible] [illegible] [illegible] his~~
~~[illegible]~~
~~[illegible]~~
~~[illegible] [illegible] Re[illegible]~~
~~[illegible] [illegible] of~~
~~[illegible] [illegible] [illegible]~~
~~[illegible] [illegible] 5 or~~
~~[illegible] [illegible]~~
~~[illegible] Chro[illegible]~~
~~1/2 [illegible] [illegible]~~
~~Com[illegible]~~

~~Gibbs to try Caption~~
~~[illegible]~~
~~[illegible] [illegible] wrapped~~
~~[illegible]~~

~~Try Oxidizing a nickel~~
~~strip [illegible] plate~~
~~we have [illegible]~~

If [illegible] [illegible] of the
surface that the surface of the
shoe [illegible] diaphragm [illegible]
should be the same [illegible] pressure
just a [illegible] so that maximum
pressure should come on it.
If its spread over larger
the area the pressure will
be 1/2 [illegible] each area 5 6

~~Tell Hamley about [illegible]~~
~~[illegible] Charge [illegible] from~~
~~8 to 10. miles [illegible]~~

$Cu(OH)_2$ [illegible] + something
[illegible] [illegible] [illegible] condition
[illegible] [illegible] [illegible] [illegible] Carter
with [illegible] [illegible] [illegible]
to [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]
for [illegible] – [illegible] KOH + Cl –

Hamley Run a Call on 27/
KOH + [illegible] [illegible] 45 % [illegible]
ditto NaOH 10 + 25
get characteristics
also oil –

~~Hoffman [illegible] Meade [illegible]~~
~~not Kamp blade but~~
~~Chemo – no free~~
~~phenol + [illegible] [illegible]~~
~~6/4 + [illegible] 2 [illegible] 2~~
~~doz each Edged +~~
~~put away for~~
~~time test~~
~~Make [illegible] [illegible]~~
~~with Reg weight~~
~~a 50% more~~
~~with [illegible] [illegible]~~
~~[illegible]~~

Ford driver for morning & noon named Fairbanks
Telephone 3799 M Orange
if want him any time –

Get average of Federal Scale for Scrap iron in old C&M yard 450
also 2nd lot of 1 Bat.

---

old Negrozene 4
new 5
paper included
100 cc Al Card
Seems poor solubility

6.79 Quarts per 100 Blanks –
3.57 for Varnish Etc –
#9 Mils per record
Aug 10/21

All our old Masters are spongy underneath & over polished thousands of Cavities appear so we do not polish out the Chatter marks – This probably has something to do with grafite & very long covering with Low Current

We must Experiment on this in rearranged garrage find the Cause & stop it

See if gold coating does same thing – also the

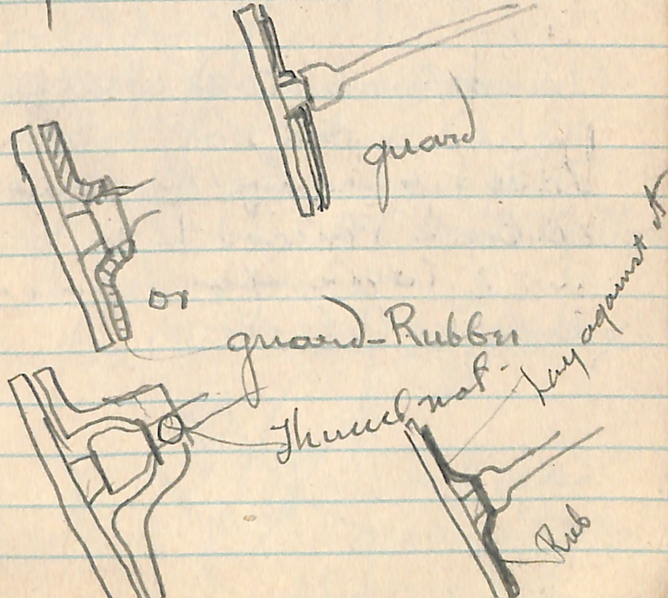
~~greatest density of Current~~
~~we can use on gold to~~
~~Cover quick.~~
~~I've noticed this phenomenon~~
~~on treating some mounts~~
~~with Cyanide some show~~
~~thousands of circular~~
~~Cavities & others none~~
~~s s~~
~~: : Use Klg in Experimenting~~
~~in addition to polishing~~
~~to bring out Cavities~~
~~Neither should show~~
~~any~~

~~Wirth - Do you break~~
~~Vac thru Cotton~~
~~So clean air goes in~~

~~In new Garrage Lab~~
~~Try Excess Acetic to the~~
~~Limit - Keep temp 100~~
~~back up Ni by fast~~
~~plater so thin sheets~~
~~dont bump -~~

~~Also try a Ni/porous~~
~~under the Jacket like~~
~~Master Copper~~

Try the



~~Alcohol + Caustic Soda in sol~~
~~may dissolve our wax~~
~~possibly Benzol or Alcohol~~
~~if it don't salt affect the~~
~~stearates~~

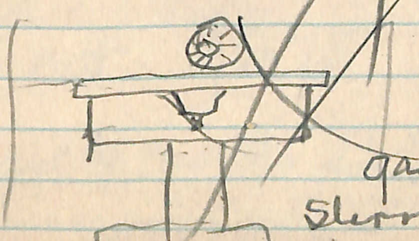
~~Better get chips fine~~
~~dissolve all can by Benzol~~
~~pour off treat again by~~
~~Alcohol again by~~
~~Alcoholic KOH,~~
~~+ so on~~

~~As soon as 2nd chilling~~
~~Mould is OK, go to Silver~~
~~Lake + arrange to pour~~
~~several Veneers to be ready~~
~~in 2 weeks for return of~~
~~Harris + Werner~~

~~Find out how it is stock room~~
~~is full of Matrices dropped but~~
~~not tested — Stop slowing~~
~~Matrices not tested —~~
~~Notify Hemphill~~

~~For dissolving recording~~
~~wax off masters —~~
~~12 cc gasolene~~
~~3 cc glacial acetic~~
~~does it perfectly. 80 gasoline~~
~~20 acetic —~~
~~100 Millg wax dissolves in~~
~~15 cc of solution.~~
~~4 cents lb gasolene 15 cts~~
~~lb glacial 45 cents gallon~~

~~Masters Cleaning off wax~~



~~Clean Wax from Masters~~
~~Try with discard masters or~~
~~make some Copper Masters~~
~~from formulas & then use~~
~~12cc Gasolene 3 cc Glacial~~
~~6 ditto 12 ditto & 1 cc of~~
~~kinds — finish with~~
~~Alcohol, Benzol Etc~~

~~Take roar of the~~
~~Ocean against rock~~
~~& plain shore in~~
~~a storm & put it~~
~~in a storm song~~
~~or Ocean song~~

~~Solvent for Master~~
~~wax~~

~~20 Benzol~~
~~10 DEN alcohol~~
~~1/2 part Glacial Acetic~~
~~by Volume —~~

~~Jany 1 to July 31 —~~
~~Materials —~~

~~Powder blank supplies~~	~~213618~~
~~All other Supplies~~	~~249467~~
~~Total~~	~~463086~~

~~Total Records to Stock OK~~
~~4.043.716 —~~

~~Cost 25.75~~

~~Last 4 months 25.7 with~~
~~lessened output — [illegible]~~

~~Cost Materials for all~~
~~blanks discards & all~~
~~as represented by an OK~~
~~record 5.23 cents~~

Note of Card on Repdex
is same as on my speaker
sheet dont Cut –

Aug 20/21

~~Harris Polishing~~
~~Records~~
~~to Cut, uses Chalk~~
~~& Kerosene~~
~~to polish –~~
~~China clay &~~
~~Alcohol to clean~~
~~Then Dry brush~~
~~over & back 2~~
~~Total 3 cycles~~

Polish steel Cast iron
also acid-bright steel etc
Immerse in Selenium Sol
& wash & dry quickly
& Expose to air, Varnish
etc acc of results Aug 25/21

160 Blanks for 1 gal
Chemo Varnish no
black 23½ cc
per blank 2 Coats
Aug 29/21

~~Put inspector on~~
~~Repair Dept shows~~
~~works as per Charles~~
~~memo –~~

Aug 30/21

~~Experiments shows that Glycerine is best lubricant to prevent diamonds cutting, ⑱ Diamonds with poor polish-~~

~~I find only good way is to polish Record our Reg way & in the finish Cleaning where we use Alcohol & China Clay to dissolve a little Stearine~~

~~1/2 3/4 shows wear at~~
~~10 - 1 shows wear at~~
~~20 1 1/4 shows at 30~~
~~1 1/2 none at 50 -~~
~~making stronger solution now~~

~~180 Blanks per gal~~
~~Varnish 4 men~~
~~Viscosity~~

~~Edisons Guess~~

~~Dance, both sides -~~	~~100~~
~~Dance one side Vocal other~~	~~78~~
~~Vocal both sides~~	~~56~~
~~Instrumental both s~~	~~46~~
~~Vocal 1 side Inst other side~~	~~56~~

~~Aug 30 -~~

~~Maxwell see Taylor Reports~~

Sept 3/21

See if Glycerine or oil reducing agent in Lelands force keep up Voltage

Try agents that are close
to fusion but will
not at 110° Fahr radiants
Cu

~~Pull on Earth to keep in~~
~~orbit~~

~~tons~~
~~3,200 000 000 000 000 000~~

~~Get discard sheet 6 weeks~~
~~& Cover the Poor Prints~~
~~Snaps, & Varnish poor~~
~~prints with dates -~~

~~Get draftsman to go on with~~
~~Electric Truck -~~

Simpson - Reforming needle
for McChesney reproduced prints

~~Ask Simpson or Swanson~~
~~if they know a good Mac~~
~~designer -~~

~~1916 17 18 19 -~~

~~Sales 18.7% Hepplewhite~~
~~" 49.4 Sheraton~~
~~" 31.7 Chippendales~~

~~Weight of 2 printed~~
~~Labels 1 Record on~~
~~good paper ½ gram~~
~~for pair -~~

~~Cost roughly $20 000 year~~
~~Label - 5000 old~~
~~way~~

See ~~Gregg's~~ Salary

Sept 10, 21
Put in a Master with Nickel
Spot adhering - into 20%
H_2SO_4 Warm about 160
nearly disappeared in 5
hours If immersed well
& Cleaned Electrically & covered
so air dont have free access
think Ni Spot will come
off in 6 to 8 hours without
attacking Copper This
with Rubber backing on
if taken off not plate &
left in all night 15
hours gets Coated with
black scum but Chalk
& Bengal pbly As to
take it away

2 A men to go out & take
inventory records before
breaking up -
Every other one so get 1/2
possibly jobbers clerks
Can be used if so take
Every one - Make inquiries
Etc but dont take numbers
Note worn - dont take -
numbers -

Another 2 A men to go
out to Dealers, Strand E
& Coml take inventory
of selected number
in Territory of Jobbers
which 1st 2 A men
take at Jobbers -

~~Woodfine to get Sales~~
~~to dealer in Nos~~
~~of Records & mach~~
~~for 3 or 4 yrs~~

~~Get Cost of Ford~~
~~Chassis Run about~~
~~& Cost of Top for~~
~~Phonograph or other~~
~~Combin~~ —

Work up Ambersola
Cabinets in a Disc
Lateral Cut & Disc
from our Reg Records
to give dealers
both kinds —

Investigate high grades of
lumber in Domestic
pkg of phonos

~~Dummy label would be~~
~~better to be black~~

~~Get 1/2 doz returned~~
~~Repdcrs called~~
~~worn~~ —

~~With old Repdcr that~~
~~shows wear 3rd~~
~~time over disc dont~~
~~show any wear 40~~
~~times when wet with~~
~~1½% Alcohol Stearine~~
~~sol put on with Camel~~

~~hair brush lightly~~
~~so as not to make~~
~~record too dull —~~
~~feel sure [illegible] black~~
~~of Carmel even alone~~
~~would preclude it or~~
~~not remove pleasantly~~
~~any stain —~~

~~Think we could~~
~~wipe moulds with~~
~~this solution perhaps~~
~~2½% & run camel's~~
~~brush over each~~
~~print instead of~~
~~wiping & this would~~
~~take place of~~
~~Cloth & [illegible]~~
~~take place of~~
~~old H_2O_2 chloride~~

& keep moulds clean

~~Find spare to carry~~
~~wear twice per day~~
~~perhaps can't afford~~
~~to wear only little~~
~~& discard — to keep~~
~~clean so~~

~~ditto lighter [illegible]~~
~~when changing on~~
~~last cycle & and~~
~~remove stain even~~
~~with alcohol & cotton~~
~~brush —~~

~~Can take (p[illegible])~~
~~records & very fine~~
~~spray them that~~
~~will show no [illegible]~~

~~Hayes will get a viola on
18th to let me hear a
record by Marple a Contralto~~

~~Ask Gramm what he
does with foreign
records rejected~~

~~Why not divide control
Scarlett, 1 part Edmunds the
other - too much for men
we can hire~~

~~Phillips to get reorders in the
6 months corresply to
jobber orders -
also Williams see about
it —~~

Sales to jobbers 6 months ??

Reg sup	636,392
Popular	981,490
Total	

6 / 1,617,882 —
per month 269,647 ??

Must be lots reorders -

Reg sup 6 months

Instrumental	Comic	Band	Vocal concerted secular	ditto Religious	Violin
7.54	3.51	4.57	3.82	4.10	3.55 %

Vocal classic Concert room	Opera Vocal Classic		Symphony Orch	Vocal Miscellaneous
2.38		2.06	2.73	5.06

Popular

Dance	Vocal	Instrumental	
32.69	27.08	0.91 ?	???

All vocal including	Popular	48.01%
" Instrumental "	"	51.08

Did he sell them in this ratio ???

Manufacturing as of Sept 1/21
we are earning in all Coy at
Orange Silver Lake & [illegible]
83 M per month —
Don't believe it.

~~Sept 18/21 Maxwell~~
~~says in NO.~~
~~Total Dealers 4404~~
~~of which 2384~~
~~are Edison Dealers~~
~~Exclusive.~~

~~Plating Inspector on~~
~~nights part time~~

~~Arrange Just~~
~~Inspector nights~~
~~Disc plant~~

Dia^meter^ polishing brushes
is 3 1/4 inches
Dia of worn & discarded
brushes 2 1/4 inches
Polishes 5800 records
Lasts 140 hours
Cost $1,50

~~Price Ford Run about~~
~~Self starter, demountable~~
~~rims Extra wheel & tire~~
~~Carrier $477 32/100~~
~~Delivered at Orange~~

70%s OK Reprint, reduces
Cost per reprint from
31.4 to 24.5

~~Get from Medcalf~~
~~typed Copy of~~
~~[illegible] Report~~
~~on [illegible] blank~~
~~22/21~~

~~See about getting~~
~~Spray [illegible]~~
~~Pyralin~~
~~Paint for Machines~~

We have in a Restaurant in
East Orange a Chippendale
with sign over — Boys
say very fine Adult
This putting by no fad
[illegible] perhaps

~~Varnish Dept~~

~~47 Varnish girls~~
~~work piece work~~
~~Make 135000 blanks~~
~~a week Girls work~~
~~approx 7 to 8 hours~~
~~day or total 30 to 32~~
~~days week~~

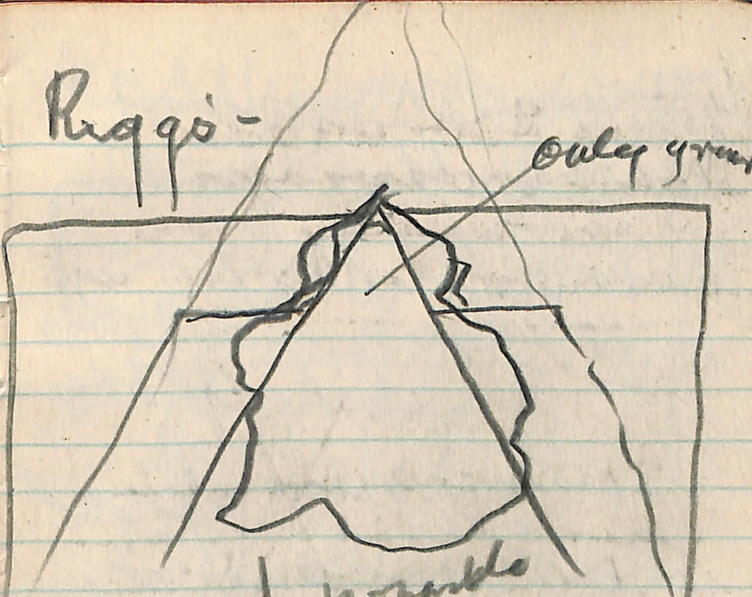
~~1 girl turns out about~~
~~200 1 Coat blanks~~
~~per hour~~
~~or 100 2 Coat~~
~~7 men do handling~~
~~Kurtz [illegible]~~
~~Cost 4/10 cent~~
~~per ok blank~~

~~Stevens, Have we agent in Italy – Prospects Comparatively low Have sent for best foreign agts~~

~~Automatic Syphon Chemical Abstracts June 10/21 page 1642 L Oth makes test~~

~~See if Capsand on a Mail Carrier route by parcel post 22 lbs from one part of Route to another~~

Raggio –



If possible

~~Vandergrift How about Wed deal~~

~~get Estimates all depts Disc for 50% instead of 66·⅔~~

get small map USA &
mark jobbers territory

~~Maxwell What's matter~~
~~with California jobbers~~

~~Write down plan~~
~~New London &~~
~~arrange -~~

~~Maxwell 2 or 3 trial~~
~~Cos - discount Installment~~
~~paper secured by note~~
~~on high % - Trial~~
~~Co start 1 man~~
~~& experiment 1 locality~~
~~just an experiment~~
~~show statistics~~

~~Maxwell - Drop tech~~
~~Management except~~
~~Cement attend~~
~~Speedily accounting~~
~~& financial -~~

~~Old or dark flake~~
~~brightened by boiling~~
~~½ hour in 10% Sodium~~
~~Bisulphite - wash free of~~
~~this salt Wash in~~
~~one tenth of 1%~~
~~Caustic Soda Solution~~
~~Dry in air~~ Yes

~~Listen to old record~~
~~moulds not yet issued~~
~~do a few daily so~~
~~Hayes can make up~~
~~Supplements ahead~~

Get some moulds with
Nickel Spots on & test
Use new method in the porcelain
dishes 20% H_2SO_4

~~Get up Waterproof~~
~~Packing Case for~~
~~20 Records. for~~
~~new Shipping Scheme~~

~~Sept 28, Standard = Negrosine~~
~~3/16 of 1%~~

~~See if diamond~~
~~points are soldered~~
~~in arm by a flame~~

~~See if anybody else~~
~~than Halsey get~~
~~Opera tickets —~~

~~See if an attachment~~
~~or Seal can be put on a~~
~~Reproducer, so attachments~~
~~Can't be used,~~

~~Get number repairs~~
~~on Gold Coated~~
~~Masters now~~

~~Have Adams the~~
~~Inspector with Green~~
~~record all return~~
~~Record Numbers~~

~~Try 12 Baked~~
~~blanks pointed~~
~~over with 1½ %~~
~~Stearin in alcohol~~

~~+ make wear~~
~~test after + before~~
~~polishing 6 each~~
~~If shows OK +~~
~~nickel rate OK~~
~~using new nickel.~~
~~try 96 + so on~~
~~see if nickels keep~~
~~clean — No Alch~~

~~Vandermast ?~~
~~hear nothing~~
~~about wear test~~

~~Does Harris polish~~
~~before or after~~
~~Inspection~~

~~What Salary is Greene~~
~~getting —~~

~~See cleaning of files~~
~~used for removing Edge~~
~~on blanks~~

~~Same tune Dance on~~
~~one side Song on the~~
~~other of artist —~~

~~Reprint — Reprint~~
~~again — see how~~
~~far Can go~~ Try Dally
Records also

~~1st Get sample of new mud at SL on ground 20 lbs general sample — also stuff in big tanks ditto old mud [illegible] hard to work & Experiment on it myself —~~

~~2nd Use cloth with most 1½% wiping blanks before pressing — No Alc on new polished moulds~~

~~3rd See Losey on 4 instruments only but varied for genl work~~

~~4 Listen to accompaniments commended & Bad as recorded in books for last 10 yrs.~~

~~5 Have freight saving figured correctly by a better scheme to be made clearer~~

~~6 See Hoffman & decide about Varnish best way to do it — He hasnt answered letter~~

~~7 Design the brush cleaner for moulds instead of Cloth, Moore is probably too busy this will keep moulds always polished & stop rough records~~
Working at it now

~~8 Find a wiper that will wipe records & leave Clean eg. to run 50 on old 4 min bad Reproducer~~

~~See how Amon is recording~~
~~The Returned Records from~~
~~Jobber- [illegible]~~

Dykeman says veneer for
Record pkg boxes is
Cheaper than Pine Lumber
at $32. per M — 196 Records
cost $161. Veneer somewhere
will [illegible]

Base Instrument used
in Mardens Prayer as a
Tuba- its beautiful

~~Marshall is connected with~~
~~a Hayti Mahogany Co~~
~~can sell it Cheaper than~~
~~any Other-~~

1- $NiSO_4$ Sludge, try Centrifuging
2 Dry at 300, percolate out the
$NiSO_4$- see also if settles
3 acidify & Dry at 300 & percolate
see also if settles

~~Burk to take up Central~~
~~Store house -~~

~~Congestion at our Elevator~~
~~in #24 when working full~~
~~is Expensive have it~~
~~studied out~~

~~Country Club gets~~
~~Records thru Dykeman~~
~~Etc for Dancing Etc~~
~~every one stolen~~
~~say~~
~~by end of week~~

~~Find out why Pellington's~~
~~Cant reduce, He is always~~
~~same no matter what~~
~~reduction –~~

~~Make Reg Varnish &~~
~~Dammar 6/4 in~~
~~increments till it~~
~~wears bad –~~

~~Varnish a black with~~
~~Celluloid – see if~~
~~stands [illegible]~~

~~J Ott determine~~
~~1/2 1" 1 1/2~~
~~& times of setting~~
~~& then report to~~
~~draw off – McCoy~~
~~mud –~~

~~Get Draughtsman for~~
~~Electric Vehicle +~~

~~get lot old Cell parts~~
~~for regeneration~~
~~& find best dipping sol~~

~~Grimes~~
~~Harris can polish~~
~~more forgings for~~
~~you – Double up~~

~~Ask Hayes if he has the~~
~~Scale run with various~~
~~instruments on Cylinders~~
~~I once made~~

~~Old Cell parts are in~~
~~Chem Room for Edison~~
~~to Clean~~

Monahan [illegible] you
tools to permit packages
+ tubes to be removed
without harm to goods
Especially backing up
holder for tubes

Simpson Cam for
polishing Machine
is Cheaper than
disc on Varnish
Machine

No need to make
Varnish Machine so
heavy as model

Countershaft 6 machs

new Varnish Mach

Pots 12" dia — all filled
2 hours before using
old put 3/4 to 7/8 out
remove & put in new
on which has stood 2
hours, & so on

Look out from Drip oil
gets on blanks!

Feather [illegible] –

Inspect Edges for
Bevel before use

	% Mathematics	Moral	
A A Hassan	Jr 60% M	ok M	A
T M Murphy	60 M	ok	A
A Berman	40 M	x	A
A Billek	40 M	x	A
S Baokee	80 M	ok	A
J H Cowie	60 M	ok	A
C Shapiro	80 M	67% ok	A

Geo Mayer, not wanted
put with [illegible]
also plac[illegible] Riklin —

Today Oct 21/21
starting July 21
1913
Issued 1771 Records
2
2
354 Issues

For lubricating Records
try black [illegible]
Black M[illegible] - glycerin

Polish a repeated gold
plated on a graphite
plated down by Ewing
until holes show —
May show holes in
graphite none with gold

Divide + attack, Napoleon

Put one state on the Map
+ at 1st one section of
that state on the Map
intensively for the photos
~~[illegible]~~

Mirabeau - financing intensive
[illegible]

Hoffman – Infant Varnish
Each 1% 3% 5% 10%
Sterin. Make record
furnish S to Hoffman
as wax – try wear
after polishing record

Great – Think Lubrication can
be perfect with Dry Stearine
since these Expmts of oil
not necessary to be used on
Machinery bearings –
Can get rid oil pipe on
phono – If not add Stearine
on Brg bearings. Could be used
as a good solvent Oct 25/21

Maubert – just what are
our printing & mailing
cost & specific selling
Expenses including Bases
allowance on Amberola

Monahan – Crush &
screen is ably better
for rings than Marquette
get a better funnel
no flare Aslan off
1 ft & not close

Bradshaw Make
out & keep up to
date any [illegible]
Monthly Sup & other
Reports daily to
Attendance & costs
Know progress of
Complete settlements
& Establish basis
of quantity

I suspect Phillips didnt put all good tunes in the groups. Mark the groups in a printed Catalog + then go over + see if more tunes & put an A man on it to pick out those OK not in groups –

~~Put Many~~

Get Wax Var Records + Mayer test wear

Note fast playing Oct 29 – fine, good

Dont need outside Rubber band around Edge not to rattle In Case of future trouble

Consult Analyses at

[illegible]

Dont forget Novels 500 threads inch – Record on Reg + Duplicate on wax to form Master – 1/2 speed

10/4

Try 10/4 on a finished Metal + play

Borden, Manchester Ramsay Fields $50 Kuntze Rigby 45 –

Wilcoxson Stewart Clark Hopkins $30. now 45 Each

Record Presses use 95 lbs steam per cycle of 12 prints

Blanks Presses use 119 lbs steam per cycle of 14 blanks

8½ lbs steam per print

Get A man or somebody in place of Mallette

At Jamestown Assembly why
Cant we have Cabinet Maker
Cut & arrange everything so
Machine goes right in
& get rid of a lot of men

~~Folsom should make~~
~~15% more moulds~~
~~than his order~~
~~Calls for —~~

~~Slow down a record~~
~~the Hubermann Record~~
~~to see if I can hear~~
~~her high note Violin~~
~~Also Experiment on~~
~~Changing speed to~~
~~hear Scratch~~

~~Try new polished Mould~~
~~dipped in 8X4 2 minutes~~
~~see if pull out or dirty~~
~~dont clean~~

~~Have others listen to~~
~~the 2 Chalmers records~~

~~1 press. Complete Cycle~~
~~24 @ 25 per minute~~

Payroll on Blank mkg
$2000. week
2.22 cents for
Enough blanks to
afford 90 000 - prints

~~Fred Ott. polishes~~
~~females, more inside~~
~~than outside, Very~~
~~much~~

~~Put 12 graded~~
~~Records in Library~~
~~for time last~~
~~grading every~~
~~2 months~~

~~Buchanans new~~
~~Conveyor system~~
~~arrange as set in~~
~~with 10 servants~~
~~blank loading~~
~~machine~~

~~Work up sheet~~
~~In front of wax moulder~~
~~to take the scum -~~
~~Holes in it for~~
~~current + remove~~
~~to carry away~~
~~the scum~~

Stop bad starts
from dirty hands
Moulds & Varnishing

~~Make Wear test on~~
~~bad old replicas Coating it~~
~~with Dope by Fred Ott's man~~
~~Every 150 times — & keep on~~
~~whoevers girl I~~

~~If Jones is found good promote him in charge of outside sales in NY & a Commission through A man of good address~~

~~Get Nickel off Maslers see Moore~~

Nov 18-21 There at present listed in the group numbers

Group (Special)	18
" 1	41
2	45
3	53
4	179
5	537
	873

all the others Edison is testing to get of 6th group. or in other words culling out of 6th group all the useless ones & remaking –

~~Schmerka prepare a lot of Phenol Resin Salts Ca Mg Pb Etc – lb of each or 150 grms will all of any soluble – & Make Varnish~~

ng

for exchange by Parcel
Post + Dealers to
Customers we must
have Cloth lined Envelopes
I think —

~~Dally - Grind in little~~
~~Ball Mill or Ball mill~~
~~reground Clay + Cotton~~
~~Grind 4 wood pulp~~
~~+ 3 Chalk Dry see~~
~~what we get.~~

~~Inquire what Groom~~
~~of Presses we ordered~~
~~from Smith~~

~~Is there no place for~~
~~Moulding shop in old~~
~~Producer gas plant OK~~

~~Put the other disc in~~
~~Strong cyanide —~~
~~possibly H_2O_2 —~~

~~Muscle Shoals~~

~~Chlorate~~
~~Soda~~
~~Sodium~~
~~Calcium~~
~~Aluminum~~ } metals
~~Magnesium~~
~~Cyanamide~~
~~Ca Carbide~~
~~Cu + By products~~
~~Phosphorous. W & Red~~

Doping Machine for 8/10
on records

1	Machine	84	both sides Min
2	·	153	
3		212	3 will do
4		262	
5		303	
6		324	Carter figure

~~Allengodin tell Hopkins & Wilkinson want daily report of fine of powder. They should inspect a few blank & Count the steel pieces on each side every day —~~

~~Explain finer the powder the better the surface of Records~~

~~Start Meadowcroft on formula book full details~~

~~Draw out Curves showing danger of guaranteeing Tricks its insufficiently amount of Cotton with Excess no danger at End of Curve is the x "Hazard" of the Play~~

~~Get Bad Cu bar & retest good Balbach Cu bar test for impurities~~

~~Also find out a source of good sulphate & arrange with Dykeman~~

~~Loseys agreement Prepared Draft~~

~~Irishman abusing his wife, or a Scotchman like Ellison, The woman being recorded on phonograph — Tone test~~

~~Put Archer on way Disc moulding & Experiments soon as pots ready put Hart in Chem Lab on Orthoclase Feldspar colloid —~~

~~Before test print made should dry brush polish over & back 10 times to get a Buff~~

Ok by Arons

			Sets
Heart Songs	30.5 %	219	✓ 4.56
Comics	4.7 "	34	✓ 1.40
Operatics	17.8	128	✓ 10.60
Overtures	4.0	29	✓ 2.41
Miramba-Xylo	2.5	18	✓ 1.50
Piano Zither	1.5	11	✓ 0.9
Orchestras	12.5	90	✓ 7.5
Bands	10.8	78	✓ 3.25
Violins	6.6	48	✓ 2.00
Dances	5.1	37	✓ 1.00
Venetian + Hawaiian	4.0	26	✓ 1.00
		718	

Where is Banjo, Accordian & special instruments also non group stuff = /get more from my ~~test~~ of old non group stuff —

What head is Cohen on telefone under

Operatic	10.60	of my original list
Orchestra	7.50	
Heart Songs	4.56	
Bands	3.25	from this
Overtures	2.41	Original list
Violin	2.00	is impracticable
Miramba Xylo	1.50	
Comics	1.40	
Dances	1.00	
Venetian Hawaii	1.00	
Piano Zither	0 90	

Percent of what Aron tested
718

Heart Songs	30.5 %
Comics	4.7
Operatics	17.4
Overtures	4.0
Miramba Xylos	2.5
Piano Zither	1.5
Orchestra	12.5
Bands	10.8
Violins	6.6
Dances	5.1
Venetian + Hawaii	4.0

By using % of what we have & making up 209 @ 240 Lots it needs

72	Heart songs
11	Comic
41	Operatic
10	Overtures
6	Marimba & Xylo
3	Piano & Zither
30	Orchestra
15	Violins
12	Dances
9	Ukulele & Hawaii
209	
26	Bands
235	

This is not figured out accurately

with a few more this will make 3 sets of 240 seperate tunes, covering 6 years,

all have been passed

we can probably get 1 more set

Werner & Hayes Try Very short no bell mouth funnel to see if can get less muffling –

~~Yee~~	~~100~~
~~Roscoe Smith~~	~~300~~
~~Lamb~~	~~200~~
~~Moore~~	~~500~~
~~Dally~~	~~250~~
~~Hanley~~	~~400~~
	~~1750~~

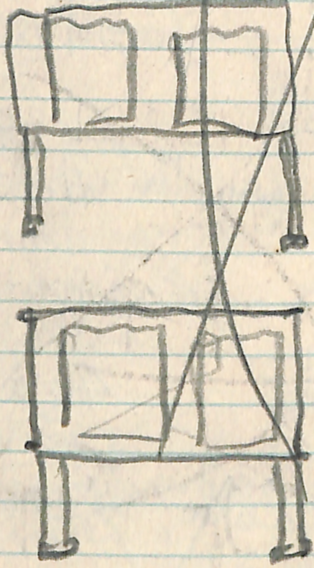
~~Fine flash, Melody types we want~~

~~~~Mes~~ Great ma with a smile~~

109 per gal

Dec 14 – got alcohol loss in blanks to 29 grams per record – good
~~~~

Dykeman
~~put heavier legs on~~
~~Consol Chip~~



Charles, why not get some
Army gas masks for
fire purposes —

Gypsy Rose
has won the Piano

Smiling

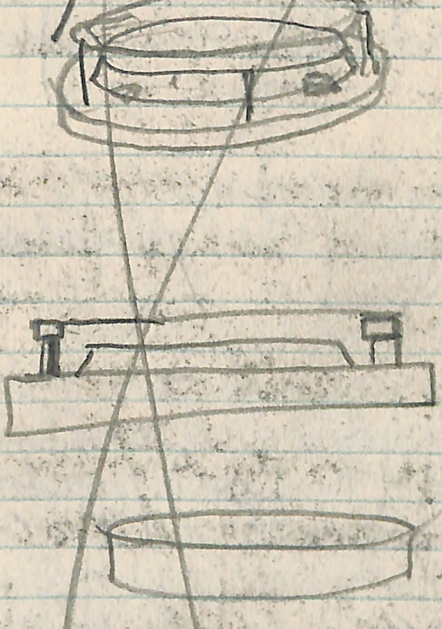
~~Match Killen on~~
~~Keep with Mousley~~
~~Bells of Good~~

~~Put Ganz on Regley's place~~

~~4/22 – get wood pail~~
~~+ asphalt made +~~
~~put KCl in it +~~
~~set it aside –~~

Fagan Tylers
in writing for More
letters regard & as
as to find if they
Ever used Lead Gallons
& what they Experience
were — & perhaps
this not good
our suspicions can
find out & then
ask they will
be glad to knock
Lead to get even

12-26/21



just put Silk bag over
ring suspended on
legs —

tried above
works OK no specs

~~Have search made on~~
~~ford starter battery~~
~~in Pat Office & Elsewhere~~

~~Folsom should keep 5/4~~
~~Dipping Sol very clear~~
~~of dirt —~~

~~The Fe plates are soaked in~~
~~water (no heat) containing~~
~~1/10 per cent of NaOH~~
~~1/10th of 1% for 4 days~~
~~on regeneration — get~~
~~after drying — grids taken~~
~~apart & contacts cleaned~~
~~Revolving Brush~~
~~Rarely acid & parts~~
~~of hanger dipped cleaned~~
~~& dried & re assembled~~

~~Find from Yee/or Monahan~~
~~if soaked Nickels are separated~~
~~from holder after reduced &~~
~~dried to clean —~~

~~Regeneration — DEC 29/21~~

~~1st Soak Cans 1 hour in~~
~~Toluol Kerosene or perhaps~~
~~thin fuel oil & then Kerosene~~
~~using fuel oil for burning~~

~~2 Drain Cans free from~~
~~Solution~~

~~3 pass cans thru fresh~~
~~Toluol or Kero.s~~

~~4 Dip in HCl 25@30%~~
~~10 minutes~~

5 Scrubbing in acidulated water 1/10th of 1%

6 Rinse with water

7 Dip in boiling hot Alkali water 1/10 of 1% NaOH.

8 Dry in air

To clean Grids poles crosshead etc

1 = Boil parts in NaOH 10% one hour

2 Dip in HCl 20 to 25% for 10 minutes

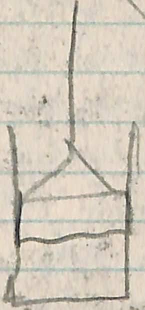
3 Scrub in 1/10 of 1% acid

4 Rinse with Water

5 Dip in boiling hot alkaline water containing 1/10 of 1% NaOH

6 Dry in air

Hart -



Jig for

flake & rings -

Meadcraft - find who has "Bentonite" see Chemical Ag. Dec 1921

weight four pound

~~Lag the Cutter Disc~~
~~moulds tank & save~~
~~steam —~~

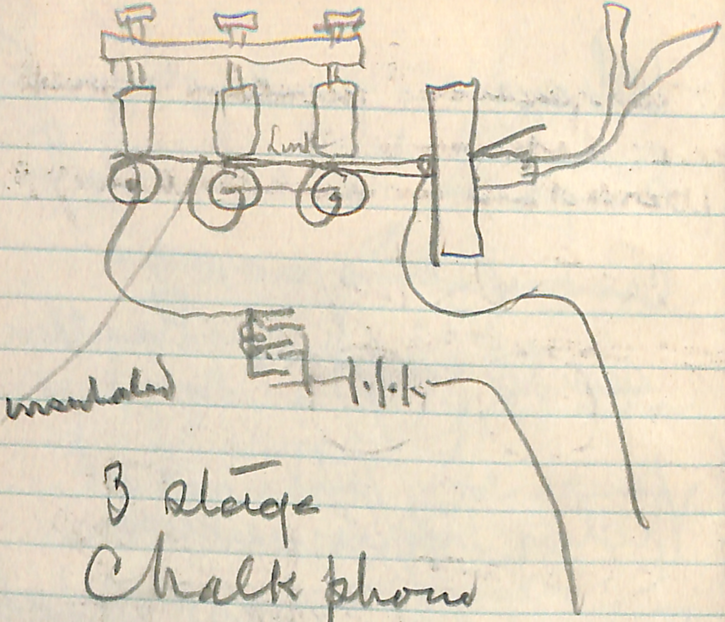
~~Try dipping Wkg~~
~~Moulds in 8/4 to see~~
~~if blistering — Ad~~
~~also stop polishing~~
~~with Rouge & test~~
~~only polish with~~
~~Dry brush & also~~
~~wiped with 8/4 after~~
~~Rouge polish~~

~~Find out lowest temp~~
~~a black will puff &~~
~~Blister —~~

~~Why not paste old printed~~
~~slips on our Envelopes in~~
~~Circulating boxes.~~
~~see Woodfin & Paullin~~

~~Victor Brunswick~~
~~Records 090 thick~~

~~See if we have~~
~~a supply of~~
~~Phenol Resin~~

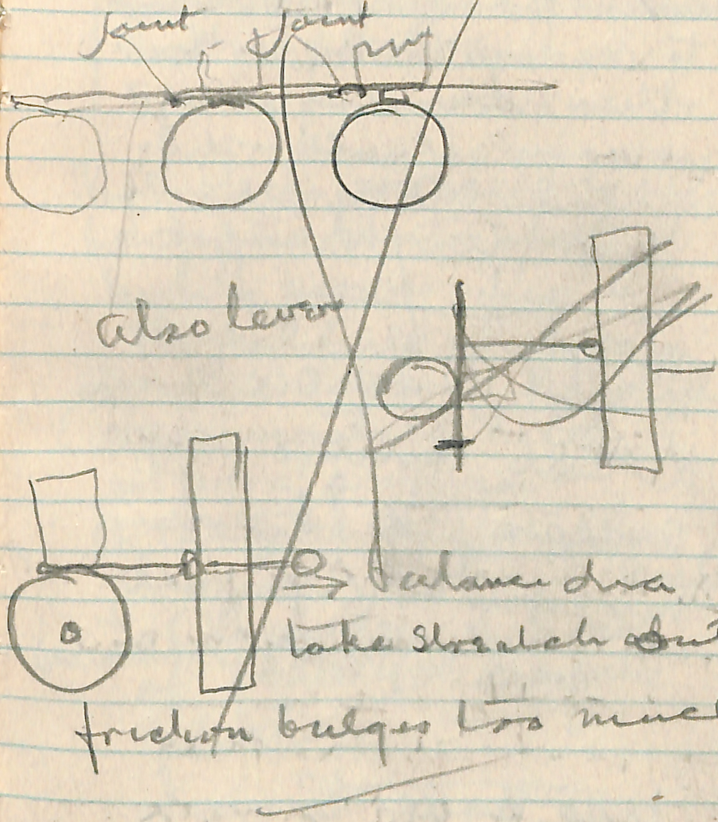


3 stage
Chalk phone

Either Multiple are but
best series -

A new radio system
use a system of vibration
12000 per sec which is
is inaudible in Bell
Receiver but is on Chalk
phone This creates
another Radio System
which works unknown

to the present system will
not disturb it
Work it out in Florida Mch 17/22



balance disc
take stretch out
friction bulges too much

Mch 1922

Ferric Salts are reduced by Mercury - This may be reason for action of our Iron pockets - Reversing to Oxidize the Hg in Iron & then redissolving as Hg2O is some soluble - thus spreads the Hg all over iron Work it up -

---

High 10 000 elec Siren Local audio sound system 200 lb press modified by Voice or Tuned to note received

Use Hyam to work a Carbon or other phone for Radio

~~Speak to Ford about burnt Lime & Macerated Corn stalks straw to make fuel briquettes - He research in his Lab -~~

~~MgO flocks, pressed & then baked to sinter & left highly porous dip in Nickel Salt & Reduce in H then soak in Ni Solution & precipitate Ni(OH)2 on pore surface - & make high rate discharge storage battery to cheapen & use of [illegible] cheap plates -~~

Mch 21/1928

Very light Mix of MgO &
Ni salt reduced in H
Mould in plate, Soak 2
or 3 times Ni salt &
precip -

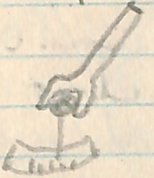
Mix 60% very fine
Ni reduced by H with
~~Coll~~ Ni(OH$_2$) Colloidal
Mould & dry

Potash -

If we get 7% from Carlsonville
Quotations are 80% KCl
$32 Ton Equivalent of K_2O
is 50.54%
80% Sulphate $41. Ton Equals
43.24% K_2O.

We get for KCl. 4.43 per ton
" K_2SO_4 6.63 ton

Take up with Whalen



earphone for
starting records

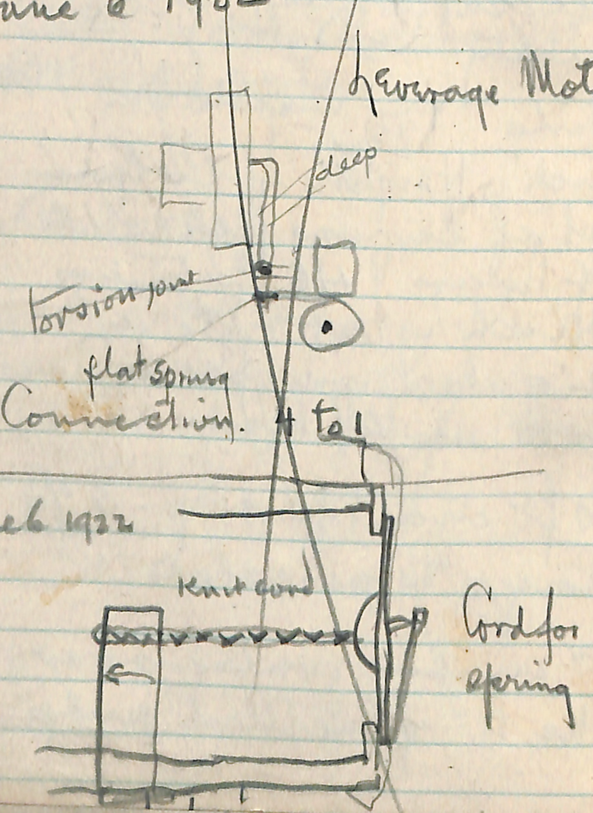
Potash Plates floated
freshly mixed.
Tube $1\frac{1}{16}$ inside dia .88
inch Heighth of Column
Vol of liquor percolated in
24 hours 46 Centimeters
which is at rate of
2 gals Liquor per square
foot in 24 hours
50 ft dia 1 ft deep - 3 3/4
days to percolate

8" inches water over
the 11" of settled pulp

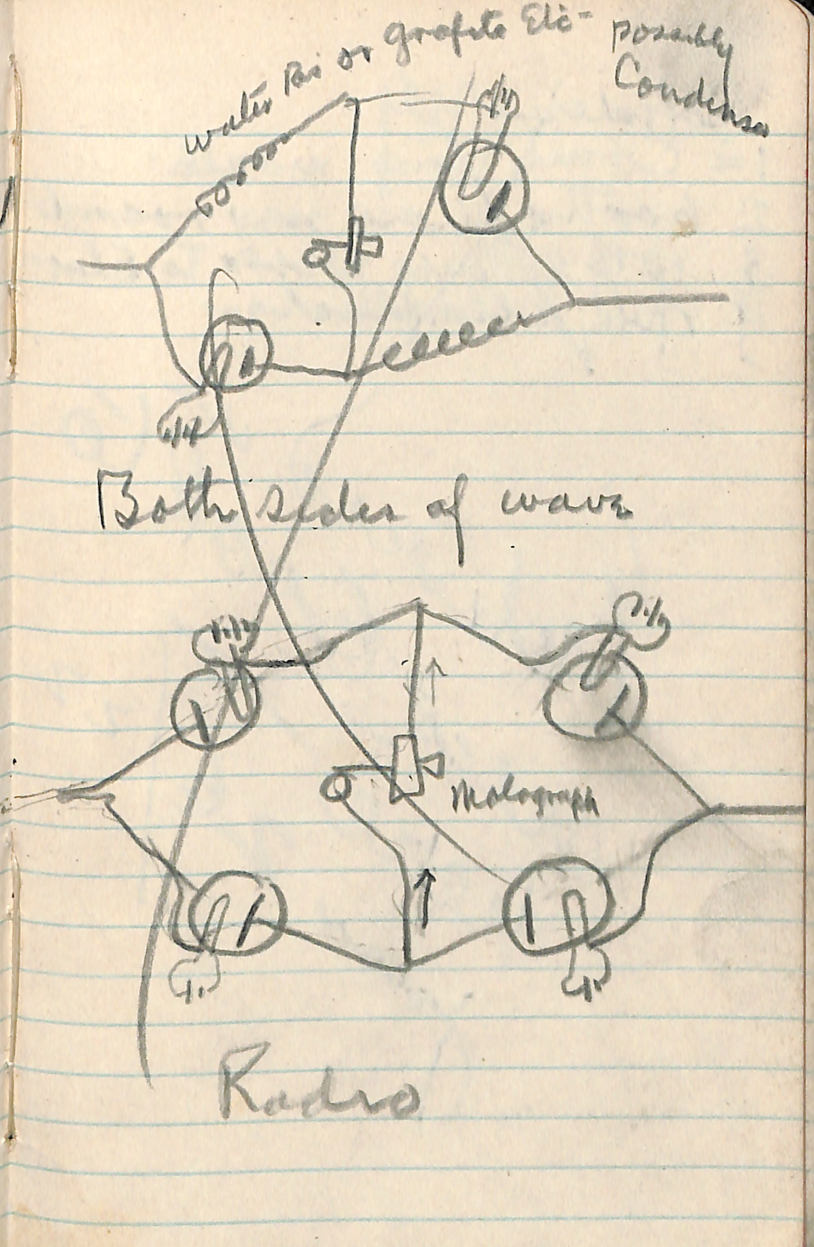
Ford starter

5000 cells daily 1000KW needed - at 1 Cent hour
Cost one starter 4.8 Cents —

June 6 1922


Leverage Motogh
deep
Torsion joint
flat spring
Connection.
4 to 1
Knit cord
Cord for spring

june 6 1922


water res or grafite Etc - possibly Condenser
Motograph

Both sides of wave

Radio

~~Coffalena Wly~~

~~1st Come twice month.~~

~~2 booths always new record.~~

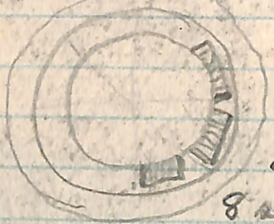
~~3 10% selling pieces to Stores.~~

~~4 quit allotments—~~

Entered in new book to here—

June 26/22

Phenay



Diamond rougher
8000 Revolutions 3600 ft min

---

see 2nd plating oxdzd [illegible]
Strips

See residue from Negrosine.

Hoffman Varnish without
Negrosine—

Fred Ott hurry the Varnishing
Machine—

20 000 000 Tons at VEL of
100 Million miles
second will Keep Earth
in its orbit —

This 20 Million tons is

$\frac{1}{240.000\,000\,000\,000}$ part of the
weight of the Earth—

200 000 000 Tons at 10 million
miles sec is same thing
this would be $\frac{1}{24.000\,000\,000\,000}$
of weight of Earth

Mattelli— How about
Expts with Record play

Simpson — Design
machine to undink
Canada Record (Mad[illegible])

Archer — test bags wood pulp — test as comes from Machines — as is loaded test everything — bring all residues & daily Report — Chemical test Rosin — Chalk & pulp every day & Generally Everything

As everything is traced to black & start daily tests & reports to go to [illegible] — Like planning —

~~Unmerchantable Records Returned as these Come in under the 15% return allowance~~

~~See if Shaw ever applied for regeneration by split tube Hypo & glycerine Glucose for enlighten flasks by acid if not do so —~~

~~d Ott & myself go over to place rigged up for mfg wax medium If not locked get a key & lock put on~~

Mch 20/1922

Things to be done to meet Competition - new stuff

1 = fix our new Reproducer to play needle records OK

2 = Church Choir songs for Loud Machine -

3 Singing lesson records

4 School song records

5 Special cheap language song Catalogue

6 Books - Humphrey read Condensed Gaboriau - O Henry, Maupassant 400 to 500 threads 12"
Books scheme

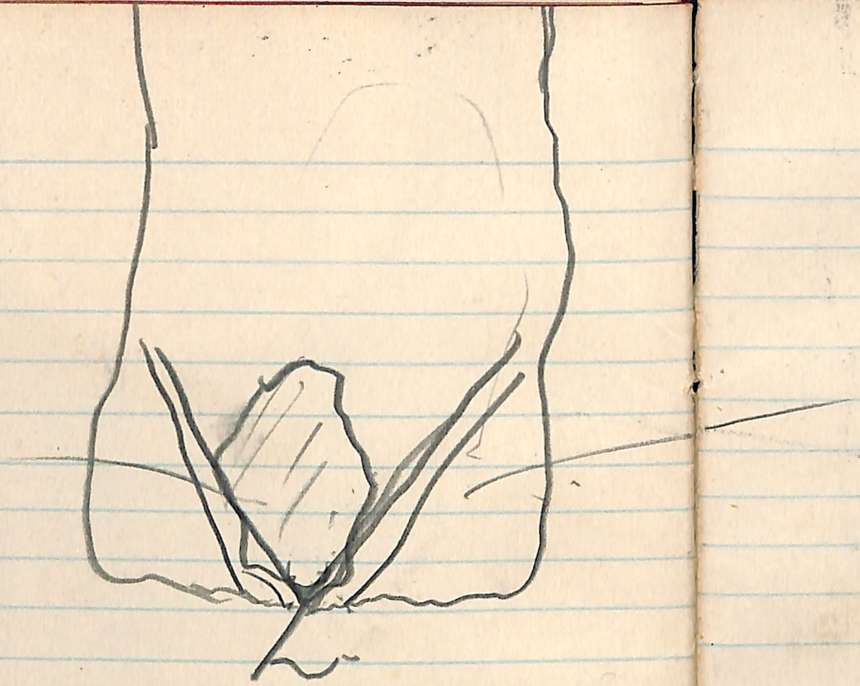
7 Special Repdr for ~~[illegible]~~ soft stop scratch

8 System of Amberola & records on trial & circulating

9 - Cafeteria records again Come twice a month instead of once a month test out

10 Gibbs take out patents for new things on Loud phono & lay out other patents -

~~[illegible]~~



125 000 ft to Mile -

400

5 0 0 0 0, 0 0 0

1 1

97 Feat 2.5 - 24 20

3 Neck 25 - 4 75

24.9.5

97

25

485

194 0

24.2

24

20

48

24 95

20

49.90 0

24 20

20

48 4

1500

48

15

63

97

49 90

48 40

1 50

48000

125
39
1125
375
4875

90
58
720
450

90
56
540
44

90
54
360
450
4860

2

25
5000
40 / 12.5000

25 Million Sq ft to Mile — 600 acres

78
90

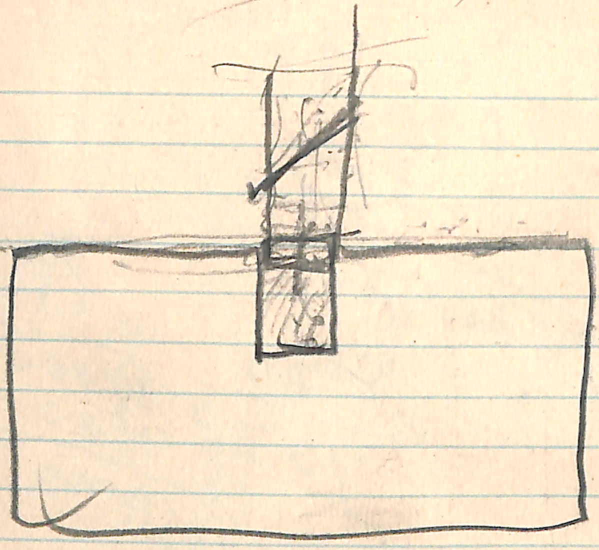
125

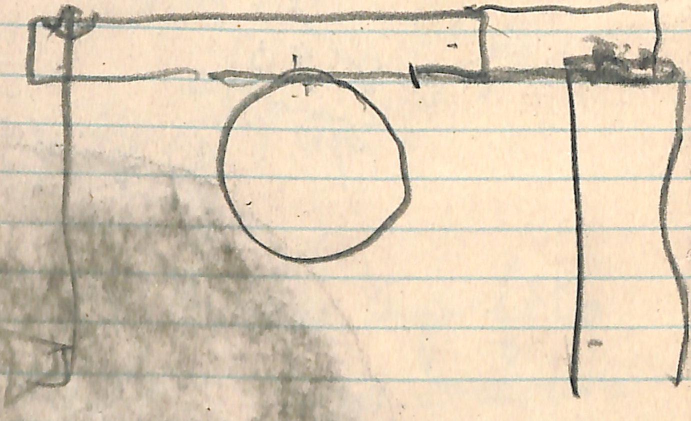
5000
5000
24000000
125
75
625
875
9375

8000
55
4000
4400
4800

125
725
250
875
900

4800





38000
15
190000
38000
570000

1'' 57

3

[illegible] 800 000
[illegible] 3
[illegible] 2 64
[illegible] 1 [illegible]
6000
9,70
621 000
7 [illegible] 000
[illegible]

[illegible] 910

[illegible] 1
[illegible] 1 [illegible]

[illegible] 455
[illegible] 2 099
[illegible]

621 000

2.7

~~[illegible]~~
[illegible]

40

110
40
4400

Wath

110

1

280
110

60
3
9

72
65

72

150
72
300

56
3150
280
1050
3

150

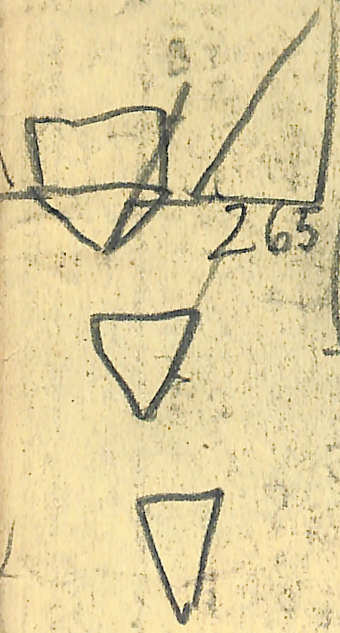
150
30
4500

56
3
168

1

12

265



1750 (75
1655
95
155